



BOROUGH OF CHATHAM.

Medical Officer's
Report, 2—
1898.

CHATHAM :

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BOROUGH OF CHATHAM.

AREA IN ACRES 4,443,298. POPULATION, (CENSUS 1891) 31,657.

MALES 17,076. FEMALES 14,581.

To the Mayor and Corporation.

Gentlemen,

I have the honour to report to your Council respecting the conditions affecting the health and mortality of the Borough during the year ending December 31st, 1898, and, for the sake of uniformity, will as far as possible follow the lines of my previous reports in regard to the general arrangement of the subject matter. The wheels of Municipal machinery may at times move slowly, and it is well that they should do so, as then ample time is given for the discussion and consideration of those subjects which admit of differences of opinion. The almost unanimous desire for improvements in the Sanitary condition of the Borough, as expressed by members of your Council, is very gratifying, and such determination augurs well for the Sanitary future of the district, and greatly encourages and strengthens the hands of the officials charged with the duty of attending to the various circumstances affecting the public health.

Population.—It is now nearly eight years since the last census was taken, so that the exact population is a matter of conjecture. Assuming that it has increased in the same ratio as during the last intercensal period, I have calculated the numbers at the middle of 1898 to be 35,449.

Births.—The total number of Births registered during the year was 1,048, males 537, females 511. This is the largest number of Births ever registered in one year, and is equal to a birth rate of 29·5 per 1,000.

Deaths.—The total number of Deaths registered was 698, also a record. Out of this number 185 occurred in the public Institutions of the district, viz., 151 in the Medway Union Workhouse, and 34 in Melville Hospital. As many of the deaths occurring in these Institutions were of persons belonging to other districts, they must be deducted from the above total, whilst the deaths of those persons belonging to the district, but dying outside it, must be added. These deaths occurred in St. Bartholomew's and St William's Hospital, both situated in Rochester. The corrected return is as follows—

Total deaths registered	...	...	...	698
Deductions	...	...	...	53
				645
Additions	...	...	...	66

Total 711

Rate of mortality 20·05 per 1,000.

The Deaths registered during each month were as follows—January 60, February 55, March 72, April 38, May 44, June 46, July 42, August 88, September 72, October 59, November 49, December 73.

The numbers in each Quarter were—

First Quarter	...	...	...	187
Second „	...	...	...	128
Third „	...	..	...	202
Fourth „	...	...	...	181

If these figures are compared with the returns for 1897, it will be noticed that there is an increase in each Quarter. The increased mortality does not appear to be due to the incidence of any particular class of disease, but rather to an increase in the mortality from all classes of disease—thus showing a more general deterioration of health. The second Quarter of the year shows a much lower mortality, but there is no marked difference between the first and last Quarters, and, as is frequently the case, the third Quarter shows the largest mortality, this being due to the large number of deaths from Infantine Diarrhœa. In the following table are the Births, Deaths, and estimated Population for the past ten years.

<i>Year.</i>	<i>Population.</i>	<i>Births.</i>	<i>Deaths.</i>	<i>Birth Rate.</i>	<i>Death Rate,</i>
1889	30,609	956	541	31·2	17·3
1890	31,132	972	615	31·2	19·7
1891	31,567	932	600	29·4	18·7
1892	32,310	974	576	30·1	17·8
1893	32,974	941	620	28·5	18·9
1894	33,257	902	509	26·9	15·2
1895	33,880	979	592	28·9	17·5
1896	34,503	1000	583	29·36	17
1897	34,926	1023	596	29·3	17·1
1898	35,449	1038	711	29	20·05

It will be seen that in spite of the increase in population, which would lead one to expect more deaths—there is a considerable increase in the rate of mortality, and I cannot agree with those persons who profess themselves satisfied with the average death rate as shown in the above table, and who assert that Sanitary improvements are unnecessary fads, and of too costly a nature to be thought of. Considering the general circumstances of the locality, I am of opinion that the death rate should be lower than it is.

In estimating its value, much must be allowed for climatic influences, for the conditions under which labour is performed, for the character of the houses in which people dwell; but beyond these there are conditions controlled by the Sanitary Authority, and which must have a great influence on the mortality of the district.

The number of deaths occurring at different ages was as follows—

Under 1 year	...	...	...	176
1 and under 5 years...	...	...	..	68
5 „ 15 „	...	...	...	27
15 „ 25 „	...	...	..	51
25 „ 65 „	...	...	...	214
65 and upwards	...	...	...	162

The above grouping into ages is in accordance with the Local Government Table A appended to this Report.

The mortality in different parts of the Borough is as follows. The separate localities are the three Municipal Wards, the Medway Workhouse, and Melville Hospital.

St. Mary's Ward	...	...	...	176
Luton Ward	...	...	...	210
St. John's Ward	...	...	...	127
Workhouse	...	...	...	151
Melville Hospital	..	...	...	34

I have obtained from the Rate Books the number of houses in each Ward, and by this means have formed an approximate estimate of the population of each. Calculated on this basis the Rate of Mortality in each Ward is:

St. Mary's Ward	...	...	16·9 per 1000.
Luton Ward	...	...	14·9 „
St. John's Ward	...	...	11·6 „

The Infant Mortality or proportion of Deaths under 1 year to every 1000 Births is 168, as compared with 155 during 1897, and 123 during 1896.

I pointed out some of the causes of Infantile Mortality in my Report for 1897, and suggested the formation of a "Creche" into which infants could be taken, and tended for a small charge during the absence of their mothers at work. The figures given above mean that out of every 6 children born 1 dies before it is a year old. Such figures are simply appalling, and their significance is emphasized by the fact that a very large proportion of these deaths are distinctly preventable, being in many instances due to ignorance and carelessness in the management of young infants.

It is only by pointing out these evils and engaging the attention of the public that amendment is likely to occur. Until the poorer classes begin to realise for themselves what benefits would accrue from an observance of the elementary principles of hygiene this massacre of the innocents will continue. In spite of the much greater interest shown in matters appertaining to sanitation than was the case a few years ago, it is very surprising that so much apathy still exists, and that the question of erecting a new building, or making a new street is apparently considered of much more importance than those questions of sanitation which concern primarily the preservation of life and health.

Sex. The total number of Deaths registered amongst males was 366, and females 332.

From Diseases of the Respiratory Organs excluding Phthisis there were 95 Deaths, as compared with 87 during 1897, and 84 during 1896.

Table II. shows the number of cases from this Class of Disease during each quarter of the year.

From Phthisis, or Tuberculosis, 87 Deaths were registered, the numbers in 1897 being 75, and in 1896—84.

Mortality per 1000—2·5.

This Disease (Phthisis) is one of the great scourges of this country—being responsible for nearly 60,000 deaths per annum. During the past few years undoubted evidence of its infective character has accumulated, and what may be called a National Endeavour has been inaugurated with the object of doing something which should lessen this huge mortality. The Disease is primarily due to the presence of a bacillus which is found in the diseased tissues, and which is abundant in the sputum, or expectoration of phthisical persons. It has also been found in the milk of tuberculous animals, and is probably present in the flesh of animals suffering from this disease. Given these facts we can judge on what lines to proceed in endeavouring to prevent the spread of tubercle. It has been suggested that the Disease should be included in the list of Notifiable Diseases, but in consequence of its long duration, and the utter impracticability of placing the sufferer under such restrictions and regulations as are applicable to the infective fevers, such a measure would be unlikely to be of use. The most practical means seem to be in the direction of educating the public as to the true nature of the Disease, and the manner in which it spreads. As regards the individual sufferer, he must be careful about his expectoration. This material dries and is disseminated in the form of dust, which may be inhaled by others and so set up the Disease, therefore it ought always to be voided into some receptacle containing a disinfectant, and destroyed as frequently as possible. A like care is necessary with handkerchiefs, which are often used to receive expectoration. It is probable that the proper disinfection and cleansing of rooms occupied Phthisical cases would be useful. All milk should be boiled or sterilized before use, and the strictest regulation of dairies and milk shops by the proper authorities should be enforced. The question of destroying the flesh of animals showing signs of tubercle is still undecided. Some authorities consider that if the diseased parts are removed the rest of the carcass is quite safe, whilst others would destroy the whole carcass of an infected animal. In either case the importance of having all meat passed by a skilled inspector will be acknowledged. I can only in a Report of this nature briefly allude to this very important subject, besides the special channels of infection above indicated. What may be called the resisting powers of individuals is of importance, and any condition which tends to lower or depress the health of a population is in one sense a contributory cause of the prevalence of this Disease. Such general sanitary measures as conduce to the general well being of a locality are therefore of much importance. Pure air and sunlight, well paved streets and yards, good through ventilation of dwellings, the provision of damp proof courses in all new houses, a pure and abundant water supply, a thorough and efficient removal of refuse of every description from the vicinity of houses, all aid in reducing the amount of illness and mortality from this and from other diseases.

Diseases of the Heart caused 74 Deaths, against 60 in the previous year, and 22 Deaths were due to different forms of violence.

Diseases of the Zymotic Class, including 24 who died outside the District, caused 121 Deaths as compared with 90 in 1897, and 115 in 1896.

The Mortality from this Class of Disease is 3·4 per 1000.

The Deaths were due to the following Diseases : Scarlet Fever 5, Diphtheria and Membranous Croup 29, Enteric and other Fevers 10, Measles 27, Whooping Cough 9, and Diarrhœa 41.

Of Scarlet Fever 173 cases were notified and 107 were removed to the Hospital for Infectious Diseases. The Mortality was low, there being only 5 Deaths. I have before pointed out how powerful a factor in the dissemination of the disease—this mildness of type is—inasmuch as in some cases there is so little disturbance of health, that no medical advice is sought, and the consequence is that these unrecognised cases associate with other children, and so spread the infection.

Diphtheria and Membranous Croup caused 29 Deaths, and 129 cases were reported of which 66 were removed to St. William's Hospital. In this case Mortality is about 22 per cent., and the Disease has become of a more severe type than in 1897. During 1896 there were 214 notifications with 58 Deaths or 27 per cent. of those attacked; in 1897 the numbers reported were 121, and 15 died, or 12 per cent. of those attacked.

During the month of January 1898, there were 16 cases, 14 of which were in the Luton District, in February 5 cases, and in March 9—making a total of 30 during the First Quarter of the year as compared with 49 during 1897, and 58 during 1896.

In April there were only 2 cases, in May 7, and in June 8, or 17 during the Second Quarter as against 23 during the like period of 1897. These figures gave reasonable ground for hoping that the epidemic which had been present in this locality since November 1895 was sensibly diminishing.

In July there were 5 cases, in August 10, and in September 11 cases—making 26 for the Third Quarter as against 26 in the same period of 1897.

In October 24 cases were reported, of which 12 were in St. John's Ward; in November there were 14 cases, 10 being in St. John's; and in December there were 18 cases—giving a total of 56 during the last Quarter of the year, as compared with 23 in 1897, and 65 in 1896.

The Chart appended to the Report shows in diagrammatic form the progress of the Disease during the year.

The number of cases in separate localities was as follows ;—

St. Mary's Ward	...	...	...	...	26
Luton Ward	...	...	...	...	51
St. John's Ward	...	...	...	...	52

The numbers affected at different ages were :—

Under 2 years	...	...	...	...	7
2 to 5 years	...	...	...	...	33
5 to 10 years	...	...	...	...	57
10 to 15 years	...	...	...	...	14
Over 15 years	...	...	...	...	18

66 cases were removed to St. William's Hospital.

The number of households affected was 101 : 75 cases were females, and 54 males.

The following Table shows the number of cases of Diphtheria during each Quarter of the past six years :—

	1893	1894	1895	1896	1897	1898
First Quarter	3	8	3	58	49	30
Second Quarter	8	15	3	24	23	17
Third Quarter	11	7	2	67	26	26
Fourth Quarter	11	6	21	65	23	56
Totals ...	33	36	29	214	121	129

A reference to the above figures brings out two facts very strongly, viz. : that the period of life between 2 and 10 years of age is peculiarly subject to this Disease, and that its prevalence sensibly diminishes during the spring and early summer. That, at any rate has been our local experience.

The renewed prevalence of Diphtheria during the latter half of 1898 is disturbing, especially as there had for some time been a sensible decline. The increase is due to its presence in a part of the District hitherto very free.

In my Reports for 1896 and 1897 I have discussed at some length the various theories and influences that have been considered to cause a prevalence of Diphtheria, and I expressed the opinion that the chief factor was the personal factor—meaning by that the association and mingling together of numbers of children—one or more of whom may be suffering from a throat affection, Diphtheritic in character, but so mild that it is probably unrecognised by the parents. It must be remembered that whilst Diphtheria is often severe and fatal in character, it is also often of a very mild type, and where there are one or more cases of Diphtheria in a household it is almost invariable that some other members of the family get soreness of the throat, especially the one attending on the patient, slighter in degree but equally capable of spreading infection. Then again in many cases the apathy and ignorance of parents is absolutely criminal. In many cases that are reported children are found to have been ill for varying periods, sometimes several days before a doctor has been called in, and during this period have attended school in some instances, and in all have associated with the rest of the household. Early and prompt isolation in the true sense of the word, and not in the perfunctory manner in which it is often attempted is the surest means of checking the spread of the Disease.

I would recommend the distribution of copies of the handbill which was drawn up in 1897, setting forth plain instructions to householders as to the precautionary measures necessary in cases of Diphtheria. I think further that a more complete medical supervision of scholars is desirable, and would be of public advantage. In a large town like this such duties might be delegated to local medical men, who would in this matter act under the direction of the Medical Officer

of Health. My idea is that such Medical Examiners should be appointed by the School Authority, and report to the Medical Officer of Health as the representative of the Sanitary Authority. Even without such a measure as this, school teachers could materially assist the Sanitary Authority by rigidly excluding all suspicious cases of illness from school, and reporting such cases to the Sanitary Authority.

There were 46 cases of Fever notified during the year, 44 being due to Enteric or Typhoid Fever, 1 to Continued Fever, and 1 to Puerperal Fever. The greatest prevalence of Enteric Fever was in the Autumn, 22 cases occurring between September 6th and November 21st. 21 cases were removed to St. William's Hospital, and there were 9 deaths.

Measles, which was practically absent from the Borough during 1897, caused 27 deaths during 1898. This Disease was most prevalent during June, July and August, and on July 4th I recommended your Committee to close certain schools for three weeks. These schools were Magpie Hall Road and Grove Road Infant Schools and on the 3rd August St. Mary's and St. Paul's Infant Schools were closed. The managers of St. John's Schools had on their own account closed their schools by antedating the holidays.

My recommendation was objected to by some school managers as being unnecessary and unadvisable, but the figures in my possession contraverted this statement, and a beneficial result followed the closure of these schools. There is no unanimity of opinion amongst the managers of the various elementary schools respecting school closure. On the one hand I was asked to close schools where the absentees were but 25 per cent., and on the other hand objection was raised to the closure of schools with an absentee list of 60 per cent.

This Disease is one that some authorities consider should be placed on the notification list, but I do not see that any benefit could occur by its inclusion. It is highly infective during the few days preceding the eruption, and is then often mistaken for a common cold, consequently there would be difficulty of getting sufficiently early isolation. Notification has been tried in some localities, but has been found to be a very costly process, and I do not think the results are sufficiently encouraging to recommend the general adoption of such a measure.

Whooping Cough caused 9 deaths as against 21 in 1897.

From Diarrhœa 41 deaths were registered. This disease annually claims a large number of young infants as its victims, and it is not asserting too much in saying that a large number of these deaths are preventable. Nearly the whole of the deaths occurred during August and September, the numbers being 21 and 19 respectively. The unfortunate children who are reared in the crowded courts and alleys of towns, where proper ventilation is impossible, and cleanliness unknown, and where the air of the dwellings is hot and foul, are the greatest sufferers. In the poorer class of houses, want of proper storage for food is general, and it consequently rapidly becomes contaminated; milk, the staple food of young infants being most prone to turn sour, and to absorb harmful material. Administered in this

condition by means of dirty feeding bottles to children whose vitality is lowered by the foul close atmosphere in which they live, there is little wonder that Diarrhœa of a rapidly fatal character ensues. Dirty and overcrowded dwellings where the above conditions are present are responsible for much Infantine Mortality.

Of Erysipelas 58 cases were notified and there were 4 Deaths.

The total number of certificates received under the Infectious Diseases Notification Act was 406, classified as above.

As already stated, a large number were removed to St. William's Hospital for treatment, but there were times when removal was delayed, owing to the want of space in the Hospital, and I think that the question of providing increased accommodation at that institution should now receive consideration.

The subject of Disinfection naturally follows the discussion of Infectious Disease. Its object is to destroy the infective material or germs which persist in the rooms occupied, and in the bedding and clothing used by patients. Formerly Sulphur Fumigation was used in all cases, but for nearly two years an Equifex Sprayer has been in use, and is very satisfactory. A small room can be disinfected by this apparatus in about half-an-hour, whereas the use of sulphur practically took up a whole day for each apartment. The substance used for spraying is a Solution of Chinosol, which has the merit of being cheap, not poisonous, not harmful to the contents of the room, and almost inodorous. It is also a powerful germicide. I regret that your Committee have not seen fit to provide a Steam Disinfecting Apparatus, the need for which I have been urging for some years. It is impossible to satisfactorily deal with heavy articles such as blankets and bedding by any other means, and until such apparatus is available disinfection remains incomplete.

During the past year your Council appear to have unanimously decided on the advisability of carrying out a proper system of sewage disposal, and a Committee have visited various localities with a view of noting the best system. If, as the result of these visits your Council decide to proceed in the matter, it would be better either to consult a firm of engineers, or to offer a premium for the best scheme of drainage for the locality. It is unnecessary for me to add anything further to what I have said in previous reports on this subject.

The present year has witnessed a great change in the methods of collecting dust bin refuse, and without doubt the general principle of frequent removal which underlies the present system is a good one. The dust-bin, as previously understood, is a thing of the past, and now we have got the door-bin. Each householder is expected to place outside his front door at stated times a receptacle containing house refuse, which is emptied by the Corporation employees into a cart provided for the purpose. That is all very good—the principle is excellent, but if there were a little more uniformity in the class of receptacle provided it would be better still. Those who have seen the various appliances ranged along the pavement prior to the hour of collection must have felt that, however desirable from the utilitarian point of view this

removal is, there is something incongruous and distasteful to the eye in the array of curious looking receptacles standing on the footway. I think that having proceeded thus far in an undoubted improvement, the Corporation should insist on the provision of properly covered metal receptacles. The present heterogeneous collection of baskets and boxes permits of a lot of refuse falling into the street and on the pavement, and as a rule, the men leave it there ; and I think further that the carts should be provided with some suitable covering. At present on a windy day a good deal of noxious dust is blown from them, which is certainly unpleasant, and may be harmful to passers by.

During the year the local Waterworks Company have applied to Parliament for increased powers to provide new reservoirs, lay fresh mains, and to generally increase their supply to the public. The Town Council, with a view to future acquirement of the Waterworks, opposed the Bill, but unsuccessfully. The Company are credited with having always supplied the locality with an excellent and abundant supply of water, and this cannot be gainsaid. If it were softened before its delivery to the consumers it would, in my opinion, be an improvement, and in saying this I must not be understood to impugn the quality of the water as a beverage. I believe the Company have arranged for periodical chemical and bacteriological examinations of their water, and it will be a satisfaction to the public to read the results of these analyses. The safe guarding of the sources of a public Water Supply is a most important matter, and one which no Municipality should neglect. The evils of specifically polluted water have quite recently been seen at Maidstone and King's Lynn, not to mention other well-known instances occurring during the past few years.

It is a curious anomaly in our Sanitary Legislation that local authorities whose districts are served by private Companies possess no executive powers over their water supplies. They have no right of entry on the premises or gathering grounds of a Company—they cannot therefore go and take samples for examination, or satisfy themselves that every possible source of contamination is guarded against. Probably no Company would ever resist the visits of a Sanitary Official, but nevertheless the fact remains—that these officials have no right of entry. Only in June last certain clauses for the protection of consumers were proposed in connection with a batch of private Water Bills, which were intended (1) To make it penal to supply unwholesome water ; (2) To empower officials or consumers to take water for analysis ; (3) To empower recognised officials to inspect the sources of supply. The objection made was that clauses of such an important character should be brought forward in a Public Bill, and not in one of a limited nature, and they were therefore withdrawn, but there is no doubt that legislation on such a necessary and important subject will be again brought forward, and however satisfactory a Company may be in its administration, it cannot be denied that more adequate powers of control should be possessed by local authorities and consumers. The action of our local Company in the past, and their plans for the future, show that they are fully alive to the necessity of safeguarding the source and preserving the purity of the excellent water supplied to this Borough.

There are still some few shallow wells remaining in the Borough. The water from these wells is analysed at intervals, and as the result of this action a few have been closed during the year.

The Slaughterhouses throughout the district are subject to regular inspection, and in spite of the undoubted disadvantages of situation which some of them possess, they are on the whole kept in a very satisfactory manner.

The same remarks apply to the registered Common Lodging Houses of the district, which have been regularly inspected.

Bakehouses, Dairies and Cowsheds, and such Factories and Workshops as do not employ steam or water power, are under the control of your Sanitary Officials, and with the limited staff available for these duties, are attended to as regularly as possible.

Besides Routine work many special inspections have been made, and in many instances have formed the subject of special Reports to your Sanitary Committee. A large amount of work of this nature is also accomplished without the necessity of having to report to the Committee.

In my last year's Report, I drew attention to the need for an additional Sanitary Inspector. As the population of the Borough increases, and as fresh Sanitary laws are enacted, so the duties of your officials increase, and unless an adequate staff is provided, it is inevitable that the necessary duties are either imperfectly performed, or entirely neglected. I do not hesitate to say that the present staff is quite inadequate for the efficient Sanitary supervision of the Borough. Your inspectors do their duty as far as lies in their power, but it is quite impossible for them to attend to everything.

The subject of Bye Laws is one which earnestly calls for attention, and I trust that the Council will take this very important subject in hand. The building bye laws especially require revision and amendment.

The most important piece of Sanitary legislation of the past year is the New Vaccination Bill. The method of administration of the previous Acts had rendered legislation on the subject necessary, but the introduction of the Conscience Clause into the new Bill largely nullifies the undoubted improvements introduced by the Act. Nothing but an epidemic of Small Pox will get rid of the antipathy to vaccination. The country generally has been free from Small Pox for many years, but in some localities the conscientious objectors have been so numerous that hundreds of thousands of children have been exempted from vaccination, and in the future will provide material for a terrible object lesson in the shape of increased prevalence of Small Pox.

The improvements in the working of the Acts are the abolition of arm to arm Vaccination, and the substitution of Calf Lymph, whilst attendance at public Vaccination Stations is abolished—parents now having the privilege of vaccination performed at home after previous notice by the public Vaccinators. It is hoped that these measures will appeal to the common sense of the majority of parents. In this district I am glad to say there have been comparatively few conscientious objectors.

In conclusion, I feel sure that your Council will not relax their efforts to obtain a higher standard of efficiency in those matters affecting the welfare of the population. A careful perusal of the above Report will show that there are a variety of conditions which will in future demand the careful consideration of the Sanitary Authority, and I feel confident that with improvements in the general sanitary condition of the Borough, there will follow improvement in the general health, and a lowering of the death rate.

I remain, Gentlemen,

Your Obedient Servant,

J. HOLROYDE,

Medical Officer of Health.

Chatham,

February 10th, 1899.

Appended are the following Tables—

TABLE I. Inspector's Report of Sanitary Work completed during 1898.

TABLE II. Showing Births, Deaths and Rate of Mortality in 1898.

TABLE III. Showing Deaths from all causes, and from certain special causes during each Quarter of 1898.

TABLE A. Showing Deaths during 1898, classified according to Diseases, Ages and Localities.

TABLE B. Showing Population, Births and New Cases of Sickness during 1898, classified according to Diseases, Ages and Localities.

TABLE I.

Inspector's Report of Sanitary Work during 1898.

Houses and Premises inspected ...	...	...	...	663
Houses cleansed, repaired and lime washed	...	...	...	15
Houses disinfected ...	...	...	...	277
Wells closed...	...	...	...	2
Orders issued for Sanitary Amendment of Premises	...	...	...	48
Drains trapped . ...	...	...	...	22
Drains cut off from Cesspools ...	...	...	...	2
Drains Cleared and Ventilated ...	...	...	...	16
New Cesspools provided	...	...	...	1
New Privies provided ...	...	...	...	8
New Pavement to Yards	...	...	...	15
Removal of offensive accumulations	...	...	...	2
Removal of Animals improperly kept	...	...	...	4
Seizures of Unsound Food	...	...	...	1
Lodging Houses Registered	...	...	...	12
Bakehouses Registered	...	...	...	35
Cowsheds Registered ...	...	...	...	18
Slaughterhouses Registered	...	...	...	18

TABLE II.

Showing Births, Deaths, and Rate of Mortality in 1898.

Annual Rate of Mortality per 1,000, from							
Births.	Deaths.	Birth rate.	All Causes.	Seven Principal Zymotic Diseases.	Phthisis.	Lung Diseases.	Heart Disease.
1048	711	29·6	20.05	3·4	2·5	2·7	2·08

TABLE III.

Showing Births, Deaths from all causes, and from certain special causes, during each Quarter of 1898.

Quarter ending	Births.	Deaths.	Deaths from			
			Seven Principal Zymotic Diseases.	Phthisis.	Diseases of Lungs.	Heart Disease.
March 31st	288	187	8	25	56	18
June 30th	236	128	12	18	9	16
September 30th	264	202	70	23	12	17
December 31st	260	181	31	21	24	23

(A) Table of Deaths during the year 1898, in the Chatham Urban District, classified according to Diseases, Ages, and Localities.

NAMES OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES AT SUBJOINED AGES.							MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHED DEATHS OF CHILDREN UNDER FIVE YEARS OF AGE.																			
	At all ages.	Under 1 year.	1 & under 5.	5 & under 15.	15 & under 25.	25 & under 62.	65 & upwards.	Under 5	Scarlatina.	Diphtheria.	Membranous Group	Enteric or Typhoid Fever.	Puerperal Fever.	Erysipelas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All other Diseases.	Total.		
ST. MARY'S WARD.. . . .	176	50	21	6	12	52	35	Under 5 5 upwds.	1	8	2	17	13	1	29	71	
								.....	1	.....	.....	1	.....	.....	1	.....	.....	.....	14	21	17	.....	8	42	105
LUTON WARD.. . . .	210	72	32	15	9	49	33	Under 5 5 upwds.	2	11	4	13	1	17	56	104	
								.....	.....	.....	.....	.....	.....	2	.....	.....	.....	2	26	11	19	1	41	106	
ST. JOHN'S WARD.. . . .	127	46	14	6	5	29	27	Under 5 5 upwds.	3	1	.....	.....	.....	5	2	8	.....	.....	.....	6	.....	.....	1	34	60
								.....	.....	.....	.....	1	.....	2	.....	.....	.....	1	11	6	12	.....	3	28	67
MEDWAY WORKHOUSE . .	151	1	1		7	69	66	Under 5 5 upwds.	1	1	7	9	
									
MELVILLE HOSPITAL.. .	34				18	16	1	Under 5 5 upwds.	1	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
								.....	.....	.....	.....	.....	.....	24	9	39	.....	.....	1	36	.....	.....	2	126	244
TOTALS.. . . .	698	176	68	27	51	214	162	Under 5 5 upwds.	2	7	3	1	4	3	.....	.....	2	3	86	59	74	1	20	189	454
THE SUBJOINED NUMBERS HAVE ALSO TO BE TAKEN INTO ACCOUNT IN JUDGING OF THE ABOVE RECORD OF MORTALITY.																											
Deaths occurring outside the district among persons belonging thereto.	66	3	16	13	11	21	2	Under 5 5 upwds.	2	11	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	1	4	19
								.....	.....	.....	6	.....	.....	.....	.....	.....	.....	.....	6	4	2	.....	7	17	47
Deaths occurring within the district among persons not belonging thereto.	53	1			5	24	23	Under 5 5 upwds.	2	1	1	
								.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7	29	52

(B) *Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Chatham Urban District; classified according to Disease, Age and Locations.*

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	POPULATION OF ALL AGES.		Registered Births.	Aged under 5 or over 5.	NEW CASES OF SICKNESS IN EACH LO- CALITY, COMING TO KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.										CASES REMOVED FROM HOMES IN SEVERAL LOCALITIES FOR TREAT- MENT IN ISOLATION HOSPITAL.			
	Census 1891.	Estimated to middle of 1898.			Scarlatina.	Diphtheria.	Membranous Group.	Enteric or Typhoid Fever.	Continued Fever.	Puerperal Fever.	Erysipelas.	Scarlatina.	Diphtheria.	Enteric or Typhoid Fever.	Continued Fever.			
St. MARY'S WARD.. ..		10459		Under 5 5 upwds.	14 31	8 17	1 .....	..... 16 .....	..... 1 .....	..... ..... 23	2	7 26	5 10	..... ..... 8	..... ..... 1
LUTON WARD		14074		Under 5 5 upwds.	12 41	15 36	..... ..... .....	..... ..... 15	..... ..... 1	1 12	..... ..... .....	4 29	10 19	..... ..... 6	..... ..... .....		
St. JOHN'S WARD		10916		Under 5 5 upwds.	26 47	14 36	2 .....	..... ..... 11	..... ..... .....	2 12	..... ..... .....	12 27	6 16	..... ..... 9	..... ..... .....		
MEDWAY WORKHOUSE ..				Under 5 5 upwds.	..... 2	..... .....	..... .....	..... 2 .....	..... ..... .....	..... ..... 6	..... ..... .....	..... 2 .....	..... ..... .....	..... ..... .....	..... ..... .....
TOTALS ..	31657	35449	1048	Under 5 5 upwds.	52 121	37 89	3 .....	..... 44 .....	..... 1 .....	..... ..... 1	5 53	23 84	21 45	..... ..... 25	..... ..... 1